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Port Utilization Guide for Cisco Unified Customer Voice Portal

Release 4.0(1)

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Chapter 1

Cisco Unified CVP Port Utilization

This document describes the ports used in Release 4.0 of the Cisco Unified Customer Voice Portal (CVP) software.

This document is intended primarily for network administrators.

Port listings are presented in a table format. Where applicable, formulas are used so that you can calculate the ports beyond instance 0.

Warning: The information this document provides is based on default configuration settings. If you are working in a live network, ensure that you understand the components installed and the associated ports in use.

Note: The Microsoft Windows 2003 Server default ephemeral port range (1025-5000) may cause difficulties. A greater ephemeral port range (for example, 49152-65534, the ephemeral port range for Microsoft Windows based MCS platforms) is recommended.

This section contains the following topics:

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Port Utilization Table Column Definitions

The columns in the Port Utilization tables in this document describe the following:

• Server or Application Protocol:

A value representing the Server or Application and where applicable the open or proprietary application protocol.

Server Protocol/Port:

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An identifier for the TCP or UDP port that the Server or application is listening on, along with the IP address for incoming connection requests when acting as a server.

• Remote Protocol/Port:

The identifier for the TCP or UDP port that the remote service or application is listening on, along with the IP address for incoming connection requests when acting as the server.

• Remote Device:

The remote application or device making a connection to the server or service specified by the protocol; or listening on the remote protocol/port.

Note: The source port the local application or service uses to connect to a remote device's destination port is not specified because it is always dynamically assigned by the Operating System. In most cases, this port is assigned randomly above TCP/UDP 1024.

Cisco Unified Customer Voice Portal Port Utilization

For Cisco Unified Customer Voice Portal Release 4.0.

Table 1: Cisco Unified Customer Voice Portal Port Utilization

Server or Application Protocol	Server Protocol/Port	Remote Protocol/Port	Remote Device	Notes
Cisco Unified Custon	ner Voice Portal			
CVP Messaging Layer	TCP 23000 - 28000 (First available)		CVP Subsystem	CVP Message Bus communications
CVP SIP Subsystem, SIP Proxy Server, Gateway, Cisco Call Manager: SIP (Session Initiation Protocol)	UDP 5060 TCP 5060		SIP endpoints	Listen port for incoming SIP requests. Port is configurable.
CVP VXMLServer: HTTP	TCP 7000		IOS VXML gateways	VXML over HTTP. Calls/sessions answered on port 7000 by HTTP server which relays request to WAS on local system port 9080.
CVP VXML Server with Tomcat	TCP 7005		Local machine	Port restricted to local access only
CVP VXML Server with Tomcat	TCP 7009			AJP/1.3 Connector
CVP IVR Subsystem: HTTP	TCP 8000		Voice Browsers	VXML over HTTP
CVP IVR Subsystem: HTTP	TCP 8005		Local machine	Port restricted to local access only

Server or Application Protocol	Server Protocol/Port	Remote Protocol/Port	Remote Device	Notes
CVP IVR Subsystem: HTTP Admin	TCP 8008			WAS and HTTP Server communicate with each other through HTTP Admin on port 8008.
CVP OPSConsole: HTTP	TCP 9000		Web Browser	Web based interface for configuring CVP components
CVP OPSConsole: HTTPS	TCP 9443		Web Browser	Web based interface for configuring CVP components with SSL
CVP OPSConsole	TCP 9005		Local machine	Port restricted to local access only
CVP OPSConsole	TCP 9009			AJP/1.3 Connector
CVP Resource Manager FTP Server	TCP 21		Content Services Switch	Only opened by Resource Manager residing on the same machine as the CVP OPSConsole
CVP Resource Manager	TCP 2099		CVP OPSConsole	JMX communication from OPSConsole to CVP Resource Manager on remote device
CVP Resource Manager Java Service Wrapper	TCP 32000 - 32999 (first available)		JVM instance launched by wrapper	CVP Resource Manager Service Wrapper will no longer accept connections after the first JVM instance is connected.
MRCP	TCP 554		VXML gateway	MRCP session between gateway voice browser and MRCP server. This is the signaling path; the media path uses RTP.
RTP	UDP 16384-32767	UDP 16384-32767		Voice Media
H323 H225 RAS	UDP 1719		H.323 applications (like H.323 Gateway and H.323 terminals)	Gatekeeper H225 RAS
H323 H225	TCP 1720		H.323 applications (like H.323 Gateway and H.323 terminals)	H.225 signaling services
H323 H245	TCP ephemeral		H.323 applications (like H.323 Gateway and H.323 terminals)	H.245 signaling services for establishing voice, video, and data
CVP SNMP Forwarder (AIX only)	TCP 5700		CVP SNMP subsystem	CVP SNMP Forwarder services local requests from CVP SNMP subsystem

Application Protocol	Server Protocol/Port	Remote Protocol/Port	Remote Device	Notes
CVP SNMP SubAgent (Windows only)	UDP 5517,5519,5521,5523,5525		CVP SNMP subsystem	CVP SNMP SubAgent services local requests from CVP SNMP subsystem
	UDP 5516,5518,5520,5522,5524		CVP SNMP SubAgent	CVP SNMP subsystem services local requests from CVP SNMP SubAgent
CVP SNMP Server (AIX only)	UDP 8161		CVP SNMP Forwarder	
CVP SNMP Server Java Service Wrapper (AIX only)	TCP 32000 - 32999 (first available)		JVM instance launched by wrapper	CVP SNMP Server Java Service Wrapper will no longer accept connections after the first JVM instance is connected.
CVP ICM Subsystem	TCP 5000		IPCC Enterprise VRU CTI (ICM/IVR message interface)	Between CVP ICM Subsystem (Call Server) and IPCC Enterprise/ICM VRU PG. Port is configurable.
Web Server: HTTP	TCP 80		Voice Browsers	Voice browsers fetches media and "External VXML" files from media server. Port is configurable
IBM Informix	TCP 1526		CVP Reporting Subsystem	Database Connection
IBM Informix Storage Manager	TCP 7939 - 7942 TCP 111			IBM Informix Storage Manager Services
IBM WAS Console	TCP 9043, 9060			
Cisco Support Tools				
Support Tools NodeAgent	TCP 39100, 39101		Support Tools Application Server	Support Tools Node Agent services requests from the Support Tools Application Server
Support Tools Server: HTTP	TCP 8188		Web Browser	Support Tools Server services HTTP requests from web browser
G . T 1 G	TCP 8189		Web Browser	Support Tools Server services HTTPS requests from web

Server or Application Protocol	Server Protocol/Port	Remote Protocol/Port	Remote Device	Notes
SNMP Master Agent	UDP 161		SNMP Management Application	SNMP Master Agent listens for requests from remote SNMP management application and sends reponses via UDP port 161.
SNMP Master Agent	TCP 7161		Local SNMP subagents	SNMP Master Agent listens for TCP connections from local SNMP subagents.
SNMP–Trap	UDP 162		SNMP Master Agent	SNMP Master Agent sends SNMP traps to SNMP management application.
Syslog	UDP 514			Syslog protocol provides a transport to allow a machine to send event notification messages across IP network to event message collectors. Port is configurable.
SSH	TCP 22			Port 22 for those who use SSH instead of telnet on AIX.
Telnet	TCP 23			
RDP (TerminalServices)	TCP 3389			
pcAnywhere	TCP 5631			
VNC	UDP 5632			
VNC	TCP 5900 TCP 5800			
Windows Authentica	tion and Remote Administ	ration Ports		
For more information, Knowledge Base Artic		etwork port requ	irements for the Wi	indows Server system" (Microsoft
RPC	TCP 135			
NetBIOS Session	TCP 139			
NetBIOS NameResolution	TCP 137 UDP 137			

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Server or Application Protocol	Server Protocol/Port	Remote Protocol/Port	Remote Device	Notes
NetBIOS Netlogon/Browsing	UDP 138			
SMB	TCP 445 UDP 445			Microsoft CIFS
DNS	TCP 53 UDP 53			
NTP	UDP 123			